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2004

Preliminary Report

National Co-ordinating Agency for Population
and Development
Nairobi, Kenya

ORC Macro
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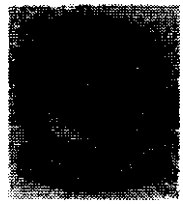

National Co-ordinating Agency for Population and Development

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MEASURE DHS

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CONTENTS

ABBREVIATIONS

AIDS	Acquired immunodeficiency syndrome
ANC	Antenatal care
ARI	Acute respiratory infection
ART	Antiretroviral treatment
ARV	Antiretroviral
BCG	Bacille de Calmette et Guérin
CBS	Central Bureau of Statistics
DFID	Department for International Development, United Kingdom
DHS	Demographic Health Survey
DPT	Diphtheria, pertussis, and tetanus
FBO	Faith-based organisation
FP	Family planning
HIV	Human immunodeficiency virus
HLD	High-level disinfection
IEC	Information, Education, Communication
IM	Intramuscular
IMCI	Integrated Management of Childhood Illness
IV	Intravenous
KSPA	Kenya Service Provision Assessment
MOH	Ministry of Health
MTCT	Mother-to-child transmission
NCAPD	National Co-ordinating Agency for Population and Development
NGO	Nongovernmental organisation
OPV	Oral polio vaccine
ORC	Opinion Research Corporation
PEP	Postexposure prophylaxis
PEPFAR	President's Emergency Plan for AIDS Relief
PLHA	People living with HIV/AIDS
PMTCT	Prevention of mother-to-child transmission
RTI	Reproductive tract infection
STI	Sexually transmitted infection
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VCT	Voluntary counselling and testing
WHO	World Health Organisation

I. INTRODUCTION

1.1 Background

The 2004 Kenya Service Provision Assessment (KSPA 2004) was implemented by the National Co-ordinating Agency for Population and Development (NCAPD), a division of the Ministry of Planning and National Development, and the Ministry of Health (MOH), with technical assistance from ORC Macro under the MEASURE DHS Project. USAID, DFID and UNICEF provided financial support for the survey and the Central Bureau of Statistics (CBS) assisted with human and logistical resources.

The survey provides detailed information on health facility infrastructure, resources, and management systems, and on services for child health, family planning, maternal health (antenatal and delivery care), and selected communicable diseases, specifically sexually transmitted diseases and tuberculosis. The survey also provides information on the capacity of health facilities to provide quality HIV/AIDS services.

This preliminary report presents early findings with regard to the principal aspects of facility infrastructure and service delivery on which information was collected. A more detailed report will be published later in 2005.

1.2 Survey Objectives

The 2004 KSPA was designed to meet the following objectives

- Describe the preparedness of government and nongovernment health facilities in Kenya to provide quality child, maternal, reproductive health, and HIV/AIDS services;
- Identify gaps in the support services and systems that may affect the ability to provide quality services;
- Describe the processes used in providing child, maternal, and reproductive health services and the extent to which accepted standards for quality service provision are followed;
- Provide comparisons on findings between provinces in Kenya and, at the national level, between different types of facilities, as well as those operated by the different managing authorities (government, nongovernmental organisations (NGO), faith-based organisations (FBO) and private for-profit organisations);
- Describe the extent to which clients understand what they must do to follow up on the services received so that the best health outcome is achieved; and
- Provide baseline information on the capacity of health facilities to provide basic and advanced level HIV/AIDS care and support services, and the capacity to maintain record keeping systems for monitoring HIV/AIDS preventive, diagnostic, care and support services.

II. SURVEY IMPLEMENTATION

2.1 Sample Design and Implementation

The sample was designed to provide a national- and provincial-level representation of all health facilities offering child health, family planning, maternal health (antenatal and delivery care), STIs, TB, and HIV/AIDS services. These facilities were stratified by province and by district, and then selected. Facilities offering voluntary counselling and testing (VCT), antiretroviral therapy (ART) and prevention of mother-to-child transmission of HIV/AIDS (PMTCT) services were over-sampled.

The sample of facilities included the following: hospitals (including national referral hospitals, provincial general hospitals, district and subdistrict hospitals and other hospitals), health centres, maternity/nursing homes, dispensaries, clinics, and stand-alone VCT centres. Facilities were weighted to compensate for over or under sampling and provide a real representation of facilities within the country.[1] Table 2.1 provides details on the numbers of weighted and unweighted (or actual) facilities.[2]

Table 2.1 Distribution of facilities by type of facility, managing authority and region

Percent distribution of facilities (weighted) and number of facilities (weighted and unweighted) by type of facility, managing authority and province. Kenya SPA 2004

Background characteristics	Percent distribution of facilities (weighted)	Number of facilities	
		Weighted	Unweighted
Type of facility			
Hospital	6	28	172
Health centre	28	125	51
Maternity	5	20	46
Clinic	2	8	67
Dispensary	56	249	69
Stand-alone VCT	2	10	35
Managing authority			
Government	56	246	175
NGO	5	21	35
Private (for profit)	14	63	143
Faith-based organisation	25	110	87
Province			
Nairobi	9	41	61
Central	11	50	62
Coast	11	49	57
Eastern	19	83	60
North Eastern	2	8	29
Nyanza	12	54	57
Rift Valley	29	126	62
Western	7	29	52
Total	100	440	440

[1] For further information on weighting, see Appendix 1.

[2] The final sample of facilities differed from the original frame, due to closure, upgrade or change of managing authority of a good number of facilities. More details will be provided in the final report.

As evident from Table 2.1, the health care delivery system in Kenya is diverse. Using the adjusted (weighted) proportions reflecting real facility distributions, a little over 5 in 10 sampled KSPA facilities were governmental, mainly managed by the Ministry of Health. A fourth are operated by faith-based organisations and the rest are either private for profit (14 percent) or NGO (5 percent) facilities. The majority of facilities were dispensaries (56 percent) compared to clinics and stand-alone VCT centres (2 percent each). Rift Valley province contributed the majority of facilities (29 percent).

2.2 Questionnaires

The KSPA 2004 used a combination of the regular SPA, the HIV/AIDS SPA and several Kenya-specific instruments to collect data. All the instruments used are listed below; however, this preliminary report does not cover all of these instruments.

- HIV/AIDS SPA questionnaire modules (10)
- The Core SPA facility inventory (7 sections)
- Health worker interview (regular and self-administered)
- Observation protocols for the following consultations: family planning, antenatal care, sick child and sexually transmitted infections (4)
- Client exit interview questionnaires for observed family planning, antenatal care, sick child and sexually transmitted infection clients (4)
- Maternity statistics form (Kenya-specific)
- Normal delivery records review form (Kenya-specific)
- Child health provider knowledge interview form (Kenya-specific)
- Maternal health provider knowledge interview form (Kenya-specific)
- District health management team questionnaire (Kenya-specific)

As an example of the application of instruments in each facility, Table 2.2 presents the number and distribution of observations of client-provider consultations. Once in a facility, interviewers observed consultations as they occurred for each type of service (e.g., STI, sick child). Hence, the sample here is more opportunistic and numbers not always reflect the proportions of facilities visited.

Table 2.2 Distribution of observed consultations

Percent distribution of observed consultations (weighted) and number of observed consultations for curative care for sick children, family planning, antenatal care, and sexually transmitted infections (weighted and unweighted), by type of facility, Kenya SPA 2004

Type of facility	Percent distribution of observed consultations (weighted)	Number of observed consultations	
		Weighted	Unweighted
OUTPATIENT CARE FOR SICK CHILDREN			
Hospital	7	102	625
Health centre	39	539	216
Maternity	2	26	52
Clinic	1	14	115
Dispensary	51	696	199
Stand-alone VCT	0	1	4
Total	100	1,379	1,211
FAMILY PLANNING			
Hospital	12	64	413
Health centre	48	259	99
Maternity	2	13	29
Clinic	1	3	28
Dispensary	37	199	52
Stand-alone VCT	0	1	7
Total	100	539	628
ANTENATAL CARE			
Hospital	11	105	636
Health centre	40	386	157
Maternity	3	32	61
Clinic	1	5	42
Dispensary	45	437	104
Stand-alone VCT	0	2	10
Total	100	967	1,010
SEXUALLY TRANSMITTED INFECTIONS			
Hospital	15	18	128
Health centre	44	52	24
Maternity	2	2	3
Clinic	1	2	11
Dispensary	37	43	12
Stand-alone VCT	0	0	0
Total	100	116	178

2.3 Training and Data Collection

2.3.1 Pretest

The 2004 KSPA questionnaires were pretested in 12 facilities over a two-week period in July 2004. A total of 23 interviewers comprising of 11 nurses and 12 social scientists completed a week (July 11-17, 2004) of intensive training in Nakuru followed by data collection (July 20-22) in facilities in Nairobi, Machakos, Kajiado and Nakuru.

2.3.2 Main training and survey

A total of 74 interviewers (3 clinical officers, 53 nurses and 18 social scientists) completed 3 weeks of training (August 22-September 11) for the main survey. Training included classroom lectures/discussion and field practice.

Seventeen teams of 4 (3 in some cases) interviewers collected data from 440 health facilities throughout Kenya. Each team consisted of nurses and at least one social scientist. Data collection included a review of the facility's resources, interviews with service providers, observations of consultations between providers and clients, and interviews with clients or caretakers of sick children following consultations.

Four of the trained interviewers were selected as field supervisors to help supervise the other teams during data collection.

Data collection began September 17, 2004 and was completed December 31, 2004.

2.4 Data Analysis

The following conventions were observed during the analysis of the KSPA 2004 data:

- Assessing the availability of items: unless specifically indicated, the KSPA 2004 considered only observed items to be available;

- Observations: Many facilities provide routine services for clients separately from the actual consultations (e.g., taking blood pressure), and there is often a period between these events and the time the primary provider assesses the client. Since it is not logistically always possible to follow a client through the entire system, whenever these services were observed being provided outside the consultation room on the day of the survey, the observed client was assumed to have received these services. Where this system is used, multiple providers contribute to the services received by each client. The provider who ultimately diagnosed and prescribed was defined as the primary provider.

III. RESULTS

3.1 Availability of Basic Services

The availability of a basic package of maternal, child, and reproductive health services and the frequency with which the services are offered are key elements influencing client utilisation. The basic services of interest are curative care for children, child immunisation and growth monitoring, any services for STIs, temporary methods of family planning, antenatal care (ANC), and delivery services. Table 3.1 provides both detailed and aggregate information on the availability of basic services by type of facility.

Before discussing the table in detail, it is important to note that the availability of the basic services are generally low in stand-alone VCT centres, since these centres are very specialised service-delivery points.

Table 3.1 Availability of basic services by type of facility

Percentage of facilities offering the indicated services, and the indicated packages of services, with the frequency and staffing indicated, Kenya SPA 2004

Background characteristics	Percentage by type of facility						
	Hospital	Health centre	Maternity	Clinic	Dispensary	Stand-alone VCT	Total
Services							
Curative care for children	98	100	93	94	96	4	95
Child immunisation	96	86	70	42	82	4	81
Growth monitoring	93	88	81	49	77	4	80
Any service for sexually transmitted infections (STI)	97	97	93	99	91	6	92
Temporary methods of family planning	83	85	87	66	68	4	73
Antenatal care (ANC)	84	86	76	53	77	4	78
Packages of services available							
All basic services at any frequency[1]	66	65	52	30	55	4	57
Facility-based 24-hour delivery services	93	64	87	10	7	4	32
At least one qualified staff[2]	100	100	100	98	99	23	98
All services, minimum frequency[3]	53	54	46	28	39	4	44
All services, minimum frequency and 24-hour delivery services	50	34	42	6	3	4	16
All services with minimum frequency, 24-hour delivery services, and with at least one qualified staff	50	34	42	6	3	4	16
Number of facilities (weighted)	28	125	20	8	249	10	440

[1] Any level of the following: curative care for children, any STI services, temporary methods of family planning, antenatal care, immunisation, and child growth monitoring

[2] Qualified staff (providers of curative care) include enrolled nurses, enrolled midwives, registered nurses, registered midwives, clinical officers and medical doctors

[3] Curative services for children provided 5 days/week, STI services at least 1 day/week, preventive or elective services (temporary methods of family planning, antenatal care) provided at least 1 day/week

Curative care for children and STI services are nearly universally available across all facility types. Child immunisation and growth monitoring services are offered in most facilities, except in clinics, where less or up to half offer these services. Similarly, a large majority of facilities offer antenatal care (ANC) and family planning (temporary methods) services, except for clinics, which offer them in between half and two-thirds of cases.

In the case of the few stand-alone VCT centres assessed, very small percentages (typically 4 percent) report offering either basic or package services. Twenty-three percent of VCT centres have at least one qualified staff in them.

In terms of packages of services, it is important to note that according to interviewees' responses, all facilities have at least one qualified staff. In general, about two-thirds of hospitals and health centres offer all basic services mentioned above. When minimum frequency of services and the availability of 24-hour delivery services are brought into the picture, only 50 percent of hospitals are able to offer this full package. Obviously, because of the nature of their specialised services (e.g., maternities), or the lack of complexity of their systems (e.g., clinics or dispensaries) fewer other facilities can offer full packages of services.

3.2 Staffing Pattern

Tables 3.2 and 3.3 provide information on the staffing pattern reported at KSPA facilities, showing the median number of health care providers assigned to outpatient services, by staff qualifications.

Table 3.2 Staffing patterns at KSPA facilities

Median number of health care providers assigned to outpatient services by type of provider and type of facility, Kenya SPA 2004

	Median number of providers assigned to each facility										
Type of facility	Total staff	Doctor	Clinical officer	Registered nurse	Registered midwife	Enrolled nurse	Enrolled midwife	Any nursing/ midwife staff	Other technical	Other staff	Number of facilities (weighted)
National referral hospital	1,570	37	45	17	161	18	258	451	175	843	0
Provincial hospital	396	17	23	33	28	49	180	293	49	15	1
Other hospital	55	3	3	2	3	4	6	21	9	11	27
Health centre	11	-	1	-	-	1	1	5	2	3	125
Maternity	10	1	1	-	-	-	2	4	2	3	20
Clinic	4	-	-	-	-	-	-	2	2	1	8
Dispensary	4	-	-	-	-	-	1	2	-	1	249
Stand-alone VCT	7	-	-	-	-	-	-	-	5	1	10
Total	6	-	-	-	-	-	1	3	1	2	440

Note: A hyphen indicates that there were insufficient numbers to include in the table.

From the table above it can be seen that, as expected, hospitals (national referral, provincial general, and other hospitals) have the largest number and variety of staff, and also highest qualifications among them. Primary-level facilities have mostly midwives, technical and other types (auxiliary) of personnel. Similarly, hospitals of different types have the largest numbers of technologists and social workers/counsellors. A few laboratory personnel can be found at lower levels of care and some social workers/counsellors are obviously found in VCT centres.

Table 3.3 Other technical staff distribution in KSPA facilities

Median number of selected "Other technical" staff assigned to outpatient services by staff type and type of facility, Kenya SPA 2004

Type of facility	Median number of selected technical staff assigned to each facility		
	Lab technologist/ technician	Pharmacist/ pharmaceutical technologist	Social worker/ counsellor
National referral hospital	87	27	17
Provincial hospital	21	8	14
Other hospital	4	2	2
Health centre	1	0	0
Maternity	2	0	0
Clinic	1	0	0
Stand-alone VCT	0	0	4

3.3 Infection Control

Infections acquired in hospitals, otherwise known as nosocomial infections, very often complicate the delivery of health care in facilities. Strict control measures are necessary to prevent the spread of such infections. The following items were assessed for infection control: soap and running water for hand washing, sharps box, latex gloves and disinfecting solutions, such as chlorine solution (in areas where reusable equipment might be contaminated by blood or other bodily fluids) in any relevant service delivery areas, and in all service area. A total of 1,233 service delivery sites were assessed in 440 facilities. Table 3.4 provides information on the elements for preventing nosocomial infections. The left half presents both the percentage of facilities that have the indicated elements in any service site of the facility and in all relevant areas (e.g., water in any place/in all examination rooms or areas). The right side of the table presents the percentage of facilities that have supplies for infection control in stock the day of the survey.

Table 3.4 Elements for preventing nosocomial infections

Percentage of facilities with the indicated elements for infection control in all assessed service sites, Kenya SPA 2004

Background characteristics	Percent of facilities with indicated items present in any/all relevant service areas[1]					Percentage of facilities with functioning equipment for sterilisation or HLD processing[6]	Percentage of facilities with stock supplies for infection control present[2]				Number of facilities (weighted)	Number of service sites[8] (weighted)
	Running water[3]	Soap	Latex gloves	Sharps box[4]	Chlorine solution[5]		Disinfectant (bleach)	Needles/ syringes	Latex gloves	All items present[7]		
Type of facility												
Hospital (all types)	96/0	99/48	99/68	99/47	88/9	92	83	73	48	43	28	303
Health centre	60/0	92/60	100/84	97/78	73/30	56	72	76	42	28	125	438
Maternity	77/0	94/59	100/81	100/53	83/21	74	66	87	48	41	20	90
Clinic	63/2	89/76	95/89	83/64	58/26	55	70	86	51	41	8	15
Dispensary	62/0	92/86	100/95	91/86	55/36	59	79	78	44	28	249	365
Stand-alone VCT	82/0	98/73	100/82	95/70	56/34	6	8	6	2	0	10	22
Managing Authority												
Government	60/0	90/68	100/89	96/82	66/37	51	69	67	37	15	246	686
NGO	77/0	99/75	100/78	98/74	39/19	74	75	67	22	20	21	60
Private (for profit)	78/0	92/73	100/86	92/66	63/26	68	74	86	62	54	63	234
FBO	65/0	97/90	100/93	89/80	64/24	71	89	93	48	48	110	253
Province												
Nairobi	83/0	99/71	100/95	91/57	75/18	58	79	79	35	30	41	154
Central	85/0	90/78	100/97	95/90	59/30	76	74	80	47	41	50	124
Coast	55/0	81/58	100/92	94/76	67/33	54	71	78	32	24	49	218
Eastern	84/0	100/80	100/92	89/85	94/67	47	86	81	29	29	83	229
North Eastern	31/0	78/52	93/74	92/71	42/15	31	79	28	47	12	8	16
Nyanza	41/0	98/83	100/95	99/87	59/41	67	72	65	40	22	54	130
Rift Valley	62/0	92/78	100/79	93/74	44/13	55	68	79	53	27	126	273
Western	34/0	83/58	100/92	100/87	62/17	94	80	69	62	45	29	90
Total	65/0	93/74	100/89	94/79	64/31	60	75	76	43	29	440	1,233

[1] Relevant service sites refer to the areas and rooms in both outpatient and inpatient units where clients with HIV/AIDS-related illnesses or those receiving HIV/AIDS-related services (including drawing of blood for HIV testing) are examined. If there are several rooms or areas in a unit for the same purpose, one is randomly picked and assessed

[2] These items are assessed in any storage area (e.g., a stock supply)

[3] Running water here implies piped water, or water in a container with a tap such that water "flows" when needed, and water is not reused

[4] To qualify as a sharps box or container, it must be made of a substance that a needle cannot readily penetrate, and must have a sealed lid that has only a small opening to allow the sharp object to be placed inside

[5] The solution must already be mixed in a container

[6] Equipment for sterilisation or High Level Disinfection (HLD) include an autoclave, dry heat steriliser, pot with cover for steam or boiling (with a heat source), or the necessary chemicals for chemical disinfection (such as chlorine bleach)

[7] Disinfectant (bleach), needles/syringes and latex gloves are all present in the storage location

[8] There may be several locations within the same facility where the same service is offered. Each such location is defined as a service site.

The availability of water in a facility (or even in a service delivery area) does not imply that providers will wash hands before seeing, and between clients. However, to increase the likelihood of providers doing so, water and soap must be available in the area where clients are being seen, or in an immediately adjacent area. Since water is usually present somewhere in the facility but not in all relevant areas (e.g., in all consultation rooms), the percentages fall from high values to zero in almost all cases. Water is present in any area in most places, except in Western, North Eastern and Nyanza provinces.

In the case of soap, latex gloves, and sharps box, there are no substantial differences in percentages between their availability in any and all areas, implying that in most places where they were needed they were present. However, in the case of chlorine solution, the percentage drops to half (from 64 to 31 percent), implying that it was not present in half of the required areas. There are no appreciable differences by type of facility, managing authority, or province, with these items.

Sterilisation or high-level disinfection (HLD) processing are usually sufficient to prepare reusable syringes and most examination equipments for reuse, however, in order to ensure that spores (e.g., tetanus) are eliminated, either dry heat sterilisation or autoclave systems (or the less frequently used chemical sterilisation) are required. About 6 in 10 facilities have functioning equipment for sterilisation or HLD processing. Hospitals, FBO and NGO facilities are more likely to have functioning equipment for sterilisation or HLD available. North Eastern and Eastern provinces have the lowest proportions of facilities with functioning equipment for sterilisation and HLD.

The availability of a disinfectant (bleach), needles and syringes and latex gloves was assessed in storage locations. All items are available in only 29 percent of facilities. Bleach is available in 75 percent, needles and syringes in 76 percent, whereas latex gloves are available in only 43 percent of storage locations of facilities. Stand-alone VCT centres, government facilities and facilities in the North Eastern province are the least likely to have these items in storage.

3.4 Child Health Services

The KSPA uses the IMCI guidelines as the basis for assessing child health services, and the observations of sick child consultations conducted in the KSPA provide the basis for assessing whether providers are adhering to standards for providing quality services. Table 3.5 provides detailed information on the assessments and examinations conducted during sick child consultations.

The IMCI guidelines are based on two major principles. All sick children must be: i) routinely assessed for major symptoms: cough or difficult breathing, diarrhoea, fever, ear problems, nutritional and immunisation status, feeding problems, and other potential problems; and, ii) examined for "general danger signs" which indicate the need for immediate referral or admission to a hospital.[3]

Assessment of Major Signs and Symptoms

Fever was the most commonly assessed symptom (80 percent) followed by cough/difficult breathing (73 percent) and diarrhoea (35 percent). Symptoms related to ear problems were the least often assessed (9 percent). Assessment of all four symptoms was observed in only 3 percent of cases.

By type of facility, all 4 symptoms were assessed most often in hospitals (8 percent) followed by clinics (6 percent) and health centres (5 percent). Though there are no clear patterns on individual assessments, relatively larger proportion of government and FBO facilities assess all symptoms (4 and 3 percent, respectively). Facilities in the Western province assessed symptoms more consistently (31 percent).

Examinations performed on sick children

The most commonly performed examination was the assessment of fever (75 percent), either by touch or by use of a thermometer. Assessment of fever was noted less often in health centres, government facilities and facilities in the Eastern province (Figure 3.1). Undressing a child to examine/assess musculature and the assessment of anaemia were both observed in 45 percent of cases. Undressing was done substantially less among NGOs and in the North Eastern province, while assessing for anaemia was less carried out in Central and Eastern provinces. On the other hand, the assessment of anaemia was done in much higher proportions in maternities and in the Western province. Fewer facilities of all types assessed respiratory, ear and dehydration problems, and few providers assessed pedal oedema, except in the Western province. Generally, in only 1 percent of cases did a provider perform all the indicated examinations.

[3] World Health Organisation (WHO) and UNICEF. 2001. IMCI: Integrated management of childhood illness. Paris, France.

Figure 3.1 Elements of Physical Examination Conducted during Observed Sick Child Consultations (N=1,378)

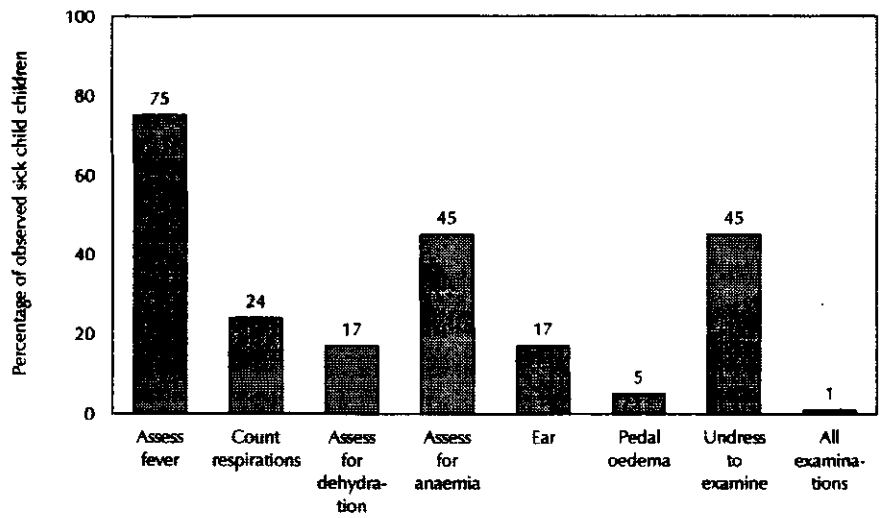


Table 3.5 History and examinations conducted for observed sick child assessments

Percentage of observed sick child assessments where the indicated assessment or examination was conducted, Kenya SPA 2004

Background characteristics	Percentage where history was elicited for indicated symptoms:					Percentage where examination was observed								Number of observed sick child assessments (weighted)
	Cough or difficult breathing	Diarrhoea	Fever	Ear problem	All four symptoms	Assess fever[1]	Count respirations	Assess for dehydration[2]	Assess for anaemia[3]	Ear[4]	Pedal oedema	Undress to examine	All examinations	
Type of facility[5]														
Hospital	79	41	80	13	8	84	39	35	63	25	11	50	4	102
Health centre	74	39	80	11	5	69	22	15	45	16	5	48	1	539
Maternity	59	42	81	12	3	94	53	32	81	37	13	50	3	26
Clinic	77	49	86	15	6	86	47	33	57	23	7	48	3	14
Dispensary	72	31	79	7	1	77	21	14	40	17	4	42	0	696
Managing authority														
Government	74	35	80	9	4	69	19	17	45	18	5	46	1	978
NGO	83	38	71	4	0	82	38	21	62	27	4	25	4	49
Private for	76	34	74	7	1	83	46	19	40	17	7	50	1	111
FBO	67	36	82	9	3	93	30	16	41	13	6	43	1	240
Province														
Nairobi	74	32	77	8	1	83	26	16	51	18	5	54	1	188
Central	82	30	82	7	4	82	13	14	16	11	1	57	0	149
Coast	67	32	80	6	2	74	37	12	36	12	5	28	0	167
Eastern	75	29	72	7	2	53	5	5	21	5	1	30	1	273
North Eastern	83	35	86	3	0	62	47	9	31	8	0	20	0	15
Nyanza	60	37	88	3	0	83	25	23	68	10	9	45	1	174
Rift Valley	75	38	79	9	0	77	21	18	57	33	1	55	0	327
Western	83	66	93	38	31	94	73	55	82	31	40	54	8	85
Total	73	35	80	9	3	75	24	17	45	17	5	45	1	1,378

[1] Either through measuring temperature or by feel
[2] Check skin turgor using pinch method
[3] Either through checking palms, conjunctiva, or gum/mouth
[4] Both look in ears and feel behind ears
[5] Stand-alone VCT facilities not eligible

Advice to caretakers

An essential component of the IMCI guidelines is the counselling of caretakers about home management of child sickness, including counselling about feeding, fluid intake and also when to send the child back to a health facility. Table 3.6 provides information on essential counselling provided to caretakers of sick children.

Table 3.6 Essential counselling provided to caretakers of sick children

Percentage of observed sick child assessments where the indicated counselling was provided to the caretaker, Kenya SPA 2004

Background characteristics	Percentage observed receiving information on: Feeding/ breastfeeding child, even when not sick	Providing extra fluids to sick child	Continuing feeding of sick child	Signs/ symptoms for which to send child back to a facility/ provider	All four messages	Number of observed sick child assessments (weighted)
Type of facility[1]						
Hospital	23	20	29	21	9	102
Health centre	17	16	20	14	3	539
Maternity	34	22	38	27	9	26
Clinic	19	18	31	28	4	14
Dispensary	14	17	16	15	4	696
Managing authority						
Government	17	17	18	14	4	978
NGO	4	16	27	17	0	49
Private for profit	18	16	22	21	3	111
FBO	13	18	22	19	7	240
Province						
Nairobi	11	11	27	20	3	188
Central	39	43	41	23	13	149
Coast	6	19	19	10	2	167
Eastern	10	9	6	9	0	273
North Eastern	3	5	7	5	0	15
Nyanza	17	19	15	15	1	174
Rift Valley	10	10	14	10	1	327
Western	54	35	36	48	23	85
Total	16	17	19	16	4	1,378

[1] Stand-alone VCT facilities not eligible

Advice to caretakers on any aspect of home management was uncommon, given in less than 20 percent of all observed sick child consultations. Providers in maternities, NGO facilities and in the Central and Western provinces were more likely to provide advice on three of several aspects of management, while counselling on home management is hardly done by providers in the Eastern and North Eastern provinces. In only 4 percent of cases did a provider advise caretakers on all 4 topics.

Caretaker knowledge

Caretakers of children whose consultations were observed were interviewed prior to their leaving the facility. Generally, only few women were able to mention these signs and symptoms (table not shown), such as when the child illness becomes worse (18 percent) or when s/he has fever (11 percent). Relatively more women from NGO facilities (56 percent) or from facilities in Coast province (36 percent) could mention some signs/symptoms. Seventy-six percent of all interviewed caretakers were unable to name a single sign/symptom for which to bring a sick child back to a facility (table not shown).

Child vaccines

The availability of child vaccines was assessed at eligible facilities, i.e. facilities that store vaccines and provide immunisation services. Table 3.7 provides detailed information on vaccine availability on the day of the survey.

Table 3.7 Availability of child vaccines

Among facilities offering child immunisation services and routinely storing vaccines, percentage with the indicated child vaccine observed on the day of the survey, Kenya SPA 2004

Background characteristics	Percentage of facilities offering immunisation services and storing vaccines with vaccine observed												Number of facilities offering child immunisation services and storing vaccines (weighted)
	BCG	Polio	DPT	Penta-valent	Any DPT	Measles	Hepatitis B	Any hepatitis	Yellow fever	All basic child vaccines available[1]	All basic child vaccines plus hepatitis available	Tetanus toxoid in area with vaccines	
Type of facility[2]													
Hospital	88	93	25	95	95	94	21	96	8	84	84	97	25
Health centre	90	90	23	85	92	84	5	85	0	79	72	87	107
Maternity	97	94	31	97	97	100	3	97	0	91	91	95	14
Clinic	77	97	42	90	100	97	23	100	0	77	77	100	3
Dispensary	91	94	27	94	94	95	4	94	6	89	89	95	182
Managing authority													
Government	88	89	27	87	91	89	3	87	2	80	77	89	200
NGO	100	100	30	100	100	100	2	100	0	100	100	100	6
Private (for profit)	95	98	43	97	98	98	40	99	3	91	91	99	29
Faith-based organisation	94	99	19	98	98	95	1	98	9	93	93	99	96
Province													
Nairobi	99	100	9	99	100	94	9	100	0	92	92	100	25
Central	78	81	63	84	84	90	1	84	6	68	68	90	41
Coast	98	98	20	98	98	82	2	98	0	81	81	99	35
Eastern	85	85	15	78	85	86	1	78	0	77	70	85	59
North Eastern	99	100	10	100	100	93	0	100	0	92	92	99	7
Nyanza	99	100	41	93	100	100	2	93	0	99	92	93	45
Rift Valley	91	96	18	96	96	93	15	96	10	91	91	93	91
Western	92	90	23	96	96	100	2	96	0	85	85	100	27
Total	91	93	26	91	94	92	6	92	4	85	83	93	331

[1] BCG, polio, any DPT and measles
[2] Stand-alone VCT facilities not eligible

A total of 331 eligible facilities were assessed. Around nine in ten facilities had BCG, polio, measles and pentavalent vaccines available on the day of the survey. The availability of these vaccines did not follow any particular trend across the different facility types, managing authorities or provinces. Apparently, in accordance with a phasing out of DPT-only vaccination, in favour of a pentavalent regime, DPT-only vaccines were found in only 26 percent of facilities (Figure 3.2). Yellow fever and Hepatitis B vaccines were scantily available (4 and 6 percent, respectively). In general, a large majority of facilities have all basic child vaccines (85 percent) and all these vaccines plus Hepatitis (83 percent).

Protocols and teaching materials

In order for providers to perform according to standards, they need to have readily available guidelines and protocols for constant reference. Table 3.8 presents a description of different protocols and teaching materials for child care available in facilities on the day of survey. Clinical guidelines are available in only 21 percent of facilities, and they are found more in the Coast and Western provinces (54 and 42 percent, respectively). Medical protocols for child illness are found in even fewer facilities (8 percent), except in hospitals (21 percent), among NGOs (22 percent) and in the Coast, North Eastern and Western provinces.

Figure 3.2 Availability of Child Vaccines among Facilities Offering Vaccination Services and Storing Vaccines (N=331)

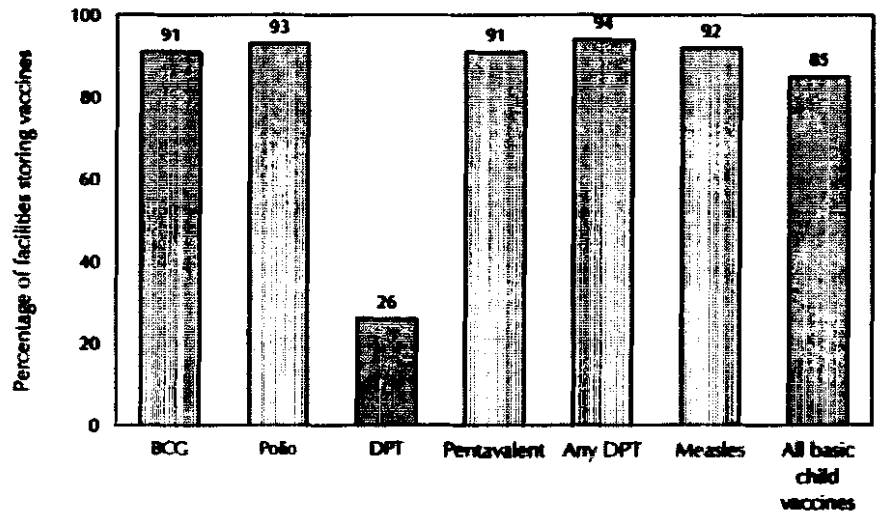


Table 3.8 Description of different guidelines and teaching materials available

Among facilities providing outpatient care for sick children, percentage where indicated guideline or client educational aid was available in the child health service delivery area, Kenya SPA 2004

Background characteristics	Percentage of facilities offering sick child services with: IMCI chart booklet	IMCI counselling cards for provider	IMCI mother cards	Clinical guidelines	Medical protocols for children's illnesses	Number of facilities offering sick child services (weighted)
Type of facility[1]						
Hospital	20	12	9	28	21	28
Health centre	10	5	4	21	15	125
Maternity	0	0	1	11	7	19
Clinic	6	0	0	18	4	7
Dispensary	11	4	6	22	3	238
Managing authority						
Government	12	6	4	23	9	236
NGO	11	1	0	14	22	16
Private (for profit)	15	0	14	26	4	57
Faith-based organisation	6	5	5	16	6	108
Province						
Nairobi	21	16	17	10	11	32
Central	1	1	1	*	1	47
Coast	34	8	8	54	28	48
Eastern	1	1	1	11	2	76
North Eastern	16	13	13	11	20	8
Nyanza	8	*	6	11	*	55
Rift Valley	8	1	6	14	2	124
Western	24	14	1	42	23	28
Total	11	5	5	21	8	418

[1] Stand-alone VCT facilities not eligible

More generic child-related materials such as IMCI chart booklets, counselling cards for providers and mothers' cards are available in very few facilities even though these are important for the provision of quality child health services.

3.5 Family Planning Services

The KSPA collected information on the availability of family planning services, and clients' perceptions on a variety of issues related to their experience in the facility and on services received. Tables 3.9 through 3.12 provide detailed information gathered from family planning clients as they left the service or facility, on their knowledge on a variety of topics related to their encounter with the provider, and on the family planning method they were prescribed or currently using.

Counselling on safe use of method

Providers of family planning methods are expected to share some basic information with their clients, specifically information on how to use the prescribed method, all possible side effects, what to do when method-related problems arise, and when to return for follow up.

Around seven in ten interviewed clients said the provider gave them information on how to use the prescribed method and when to return for follow up, respectively. However, only half of interviewed clients said the provider gave information on possible side effects and on what to do in case of method-related problems. Forty-four percent said they were given all four messages (Table 3.9). Relatively fewer clinics and NGO facilities (48 and 41 percent) and those in the Eastern and North Eastern provinces (42 and 43 percent) provide information on how to use the method. Again, a substantially lower percentage (22 percent) of NGO facilities is reported to provide information on side effects of methods.

Table 3.9 Reported counselling for safe use of family planning method

Among observed and interviewed family planning clients, percentage reporting that the indicated information relevant to their family planning method was provided to them, Kenya SPA 2004

Background characteristics	Percentage reporting the indicated information was provided					Number of interviewed family planning clients (weighted)
	How to use the method	Possible side effects from method	What to do for problems related to method	When to return for followup	All four messages provided	
Type of facility[1]						
Hospital	76	61	68	94	53	62
Health centre	75	45	53	96	37	255
Maternity	73	52	65	77	38	13
Clinic	48	47	59	84	31	3
Dispensary	65	55	54	97	51	196
Managing authority						
Government	73	50	57	95	43	400
NGO	41	22	22	100	22	38
Private for profit	75	51	53	91	45	25
FBO	77	70	66	99	64	67
Province						
Nairobi	70	54	45	89	38	52
Central	75	53	53	86	46	45
Coast	86	35	67	95	34	71
Eastern	42	29	29	97	22	133
North Eastern	43	43	86	100	29	1
Nyanza	84	51	53	97	48	33
Rift Valley	84	71	75	99	68	146
Western	83	66	66	100	53	49
Total	71	51	55	96	44	529

[1] Stand-alone VCT facilities not eligible

Knowledge of key information

Table 3.10 describes clients' key knowledge on their prescribed family planning method. Almost all users of pills and injections seem well informed about the use of their methods. With the few condom users interviewed, a large majority (89 percent) reported knowing how many times a condom could be used (once), and also most clients know that the method protects against STIs and the correct type of lubricant to use for both the male and female condom (table not shown). Note that the majority of all interviewed family planning clients were concentrated in health centres and dispensaries, and in government facilities, and also that there were more injection contraceptive users interviewed than pill users.

Table 3.10 Reported knowledge of key information for family planning method being used

Among observed and interviewed family planning clients, percentage who knew key information about use of their method of family planning, Kenya SPA 2004

Background characteristics	Percentage of pill users who knew how often to take the pill	Number of interviewed pill users (weighted)	Percentage of injection users who knew how long the injection protected against pregnancy	Number of interviewed injection users (weighted)	Total number of interviewed family planning clients (weighted)
Type of facility[1]					
Hospital	100	8	99	49	57
Health centre	100	66	97	186	251
Maternity	66	2	100	8	9
Clinic	-	0	100	2	2
Dispensary	100	24	99	170	196
Managing authority					
Government	100	90	98	297	389
NGO	100	5	100	31	37
Private for profit	64	1	88	23	24
FBO	93	4	100	63	66
Province					
Nairobi	100	14	95	30	45
Central	100	13	100	32	44
Coast	99	31	92	38	70
Eastern	100	18	100	114	132
North Eastern	-	0	71	1	1
Nyanza	100	7	99	25	32
Rift Valley	100	11	100	134	145
Western	93	6	91	40	48
Total	99	100	98	414	516

[1] Stand-alone VCT facilities not eligible

Reported perception of services

All interviewed family planning clients were asked whether certain problems frequently reported by client were big problems for them during their current visit to the facility and/or service provider. Such problems include long waiting time, no chance to discuss concerns with a provider, shortage of method/medicines and lack of privacy. As expected, not many clients are willing to critique the services they receive (Table 3.11). Long waiting time was the only big problem reported by more clients (20 percent), mostly from hospitals and health centres, in government facilities and facilities in the Eastern province. The other commonly reported problems were identified by fewer clients—less than 8 percent as a whole—except for lack of privacy (visual or auditory) reported by 17 percent of clients attending NGO facilities, and lack of availability of methods/medicines, also by 17 percent of clients from the Coast province. Between 13 and 15 percent of clients from the Western province also identify several of these common problems.

Table 3.11 Client feedback on services

Among observed and interviewed family planning (FP) clients, the percentage who reported they felt the indicated element was a large problem for them, in relation to the services they received the day of the survey, Kenya SPA 2004

Background characteristics	Percentage								Number of interviewed family planning clients (weighted)
	Long waiting time	Inability to discuss concerns with provider	Not enough explanation from provider	Quality of examination and/or treatment	Lack of visual privacy	Lack of auditory privacy	Shortage of method/ medicines	Poorly treated by staff	
Type of facility[1]									
Hospital	23	2	3	2	3	3	8	3	62
Health centre	24	1	2	2	3	4	8	3	255
Maternity	0	0	6	0	0	0	3	0	13
Clinic	6	0	0	0	0	4	0	0	3
Dispensary	15	1	2	1	4	4	7	1	196
Managing authority									
Government	26	2	3	2	2	3	9	3	400
NGO	0	0	0	0	17	17	0	0	38
Private for profit	5	0	3	0	2	2	5	0	25
FBO	1	0	0	0	0	0	0	0	67
Province									
Nairobi	17	3	8	6	0	0	3	6	52
Central	16	1	0	0	0	0	1	1	45
Coast	18	0	1	4	0	0	17	0	71
Eastern	38	0	0	0	1	1	10	0	133
North Eastern	0	0	0	14	0	0	0	0	1
Nyanza	16	1	0	0	0	0	2	2	33
Rift Valley	9	0	0	0	5	7	6	2	146
Western	17	7	13	5	15	15	2	6	49
Total	20	1	2	2	3	4	7	2	529

[1] Stand-alone VCT facilities not eligible

Family planning teaching and visual aids

Teaching and visual aids are important tools to help a provider communicate information to clients. Table 3.12 provides information on specific teaching and visual aids for family planning available in facilities on the day of the survey. This information was assessed in 326 eligible facilities, i.e. facilities that provide family planning services.

Overall, samples of different temporary family planning methods are available in two-thirds of facilities, posters on family planning in 59 percent and models for demonstrating condoms in half of all facilities. All these three items are available more often in hospitals than in other types of facilities. Visual aids for STIs and HIV/AIDS are available in lesser frequency (21 and 24 percent of facilities).

Information for clients to take home

There is less availability of these materials. Relatively more information was available on family planning (FP) than on STIs or HIV/AIDS and dispensaries were least likely to have FP information available. Maternities were least likely to have information available for clients to take home on STIs and HIV/AIDS.

Table 3.12 Availability of specific teaching and visual aids

Among facilities offering family planning (FP) services, percentage where the indicated teaching tool or visual aid was available, Kenya SPA 2004

Item	Percentage by type of facility					
	Hospital	Health centre	Maternity	Clinic	Dispensary	Total
Visual aids or teaching materials						
Samples of different methods	76	66	55	46	66	66
Posters for general promotion of FP	66	59	49	56	59	59
Visual aids about sexually transmitted infections	33	22	13	16	20	21
Visual aids about HIV/AIDS	28	21	17	21	26	24
Model for demonstrating how to use condom	54	47	45	29	52	50
Information for client to take home						
On family planning	47	45	35	38	26	35
On sexually transmitted infections	10	20	7	8	11	14
On HIV/AIDS	19	29	5	18	9	16
Service guidelines						
Any family planning guidelines	39	27	24	43	32	31
WHO guidelines for syndromic management of STIs	40	54	41	45	70	60
Other guidelines for diagnosis and treatment of STIs	11	15	11	11	11	12
Number of facilities offering FP services (weighted)[1]	24	110	18	5	169	326

[1] Includes 2 stand-alone facilities that offer family planning services

Service protocols or guidelines

The most widely found protocol/guideline was the WHO guideline for syndromic management of STIs, available in an average 60 percent of facilities. Up to 70 percent of dispensaries had these. The reproductive health policy guidelines for service providers and all other guidelines were less often available.

3.6 Maternal Health Services

3.6.1 Antenatal care

Birth preparedness

Interviewers asked observed ANC clients whether providers discussed birth preparedness during the visit (Table 3.13).

While half of all interviewed clients said a provider asked them about their birth plans (either during this or at previous visit), only 37 percent said a provider discussed items/preparations to make prior to delivery with them. On the other hand, a higher proportion (78 percent) of interviewed clients said they had already decided where they would deliver. Only 22 percent responded positively to all 3 items for birth preparedness.

Surprisingly, fewer clients in maternities than in other facilities said providers asked them about birth plans or discussed items to prepare prior to delivery. This corresponds with a relatively lower percentage of clients having decided where they plan to deliver compared with hospitals, clinics and dispensaries.

Table 3.13 Reported provider counselling and mothers' decisions for birth preparedness

Among observed and interviewed ANC clients, the percentage who reported the indicated item related to birth preparedness, Kenya SPA 2004

Background characteristics	Percentage reporting				Number of interviewed ANC clients (weighted)
	Provider asked them about their birth plans[1]	Provider discussed items/ preparations to make prior to delivery	They have decided where they will deliver	All three items for birth preparedness	
Type of facility[2]					
Hospital	43	33	80	20	103
Health centre	44	35	73	19	380
Maternity	38	23	74	15	32
Clinic	47	30	85	17	5
Dispensary	57	41	82	25	433
Managing authority					
Government	47	42	77	26	616
NGO	46	7	64	7	28
Private for profit	56	39	74	17	103
FBO	55	25	84	13	204
Province					
Nairobi	48	35	83	17	91
Central	19	30	79	9	51
Coast	58	33	90	22	100
Eastern	48	48	84	29	167
North Eastern	26	20	78	11	5
Nyanza	47	24	72	20	159
Rift Valley	54	45	72	24	289
Western	54	23	77	17	89
Total	50	37	78	22	952

[1] Either during this or previous visit
[2] Stand-alone VCT facilities not eligible

Fewer clients from the Central province reported their providers had asked them about birth plans. NGO facilities had the smallest proportion of clients reporting that providers discussed all items for birth preparedness, and these clients were less certain on where they planned to deliver. There were no clear patterns in the different provinces.

Client knowledge of danger signs of pregnancy

Providers are responsible for educating expectant mothers on specific danger signs related to pregnancy for which they should seek immediate help. Table 3.14 provides information on whether interviewed ANC clients were counselled on these danger signs (either during the current or a previous ANC visit), and client knowledge (or recall) of any of the danger signs.

Only slightly more than one-third of interviewed ANC clients said they had been counselled (either during the current or a prior visit) on risk/danger signs of during pregnancy. As expected, providers in maternities seem to have counselled clients on risk/danger signs more often than providers in other types of facility. There is a particular dearth of counselling among NGO facilities and in the North Eastern province (Figure 3.3).

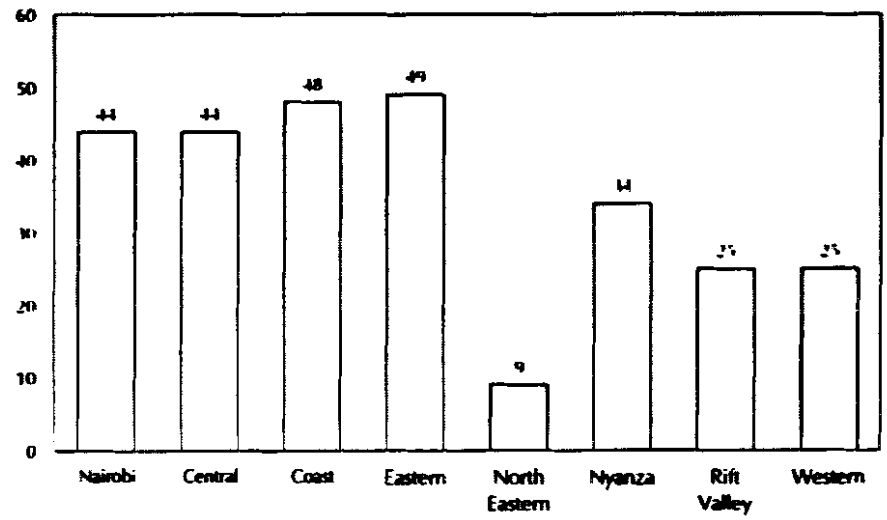
Table 3.14 Reported counselling for complications of pregnancy

Among observed and interviewed ANC clients, the percentage who reported that a provider counselled[1] on risk signs for pregnancy and who spontaneously mentioned the indicated pregnancy risk sign/symptom, Kenya SPA 2004

Background characteristics	Percentage reporting provider counselled on risk signs for pregnancy	Percentage spontaneously mentioning indicated risk signs/symptoms					Number of interviewed ANC clients (weighted)
		Bleeding	Fever	Swollen face or hand	Tiredness or breathlessness	Headache or blurred vision	
Type of facility[2]							
Hospital	38	33	10	11	9	13	103
Health centre	33	27	9	11	7	7	380
Maternity	52	28	15	13	7	24	32
Clinic	32	47	17	10	8	13	5
Dispensary	37	33	12	5	12	13	433
Managing authority							
Government	35	31	11	6	13	11	616
NGO	8	26	7	7	6	7	28
Private for profit	47	29	7	17	3	16	103
FBO	39	30	12	11	3	10	204
Province							
Nairobi	44	37	4	18	5	18	91
Central	44	34	8	1	9	3	51
Coast	48	54	14	13	16	14	100
Eastern	49	33	22	6	8	14	167
North Eastern	9	0	9	0	9	0	5
Nyanza	34	28	18	7	10	13	159
Rift Valley	25	25	3	10	11	9	289
Western	25	15	4	3	3	3	89
Total	36	31	11	8	10	11	952

[1] Either during this or previous visit
[2] Stand-alone VCT facilities not eligible

***Figure 3.3* Percentage of ANC Clients Reporting Provider Counselling for Complications of Pregnancy, by Province (N=952)**



When asking for spontaneous responses, much lower percentages are obtained: only 31 percent named bleeding, and only around one in ten mentioned fever, headache/blurred vision or tiredness/breathlessness. Swollen face or hands was mentioned by even fewer respondents (8 percent). Bleeding is mentioned more in the Eastern province, while clients from Nairobi can mention more the swollen face or hands sign and those attending maternities are more able to mention headache or blurred vision as a risk symptom.

3.6.2 Normal deliveries

Partograph availability and use by providers

The partograph helps providers to identify prolonged labour and to determine when to take necessary action. Although recommended by WHO partographs are still not widely used in most developing countries. Table 3.15 shows information related to partographs, for facilities providing delivery services.

Almost 4 in 10 eligible facilities surveyed offer delivery services (Figure 3.4). Of these, 39 percent have partographs. Hospitals (79 percent) and government facilities (44 percent) are more likely to have them. Dispensaries, NGO facilities and facilities in Rift Valley are least likely to have partographs.

On actual use of a partograph, only 38 percent of interviewed providers offering delivery services had used the partograph within 1 month of the interview. Eleven percent had never used one to monitor labour (see Table 3.15).

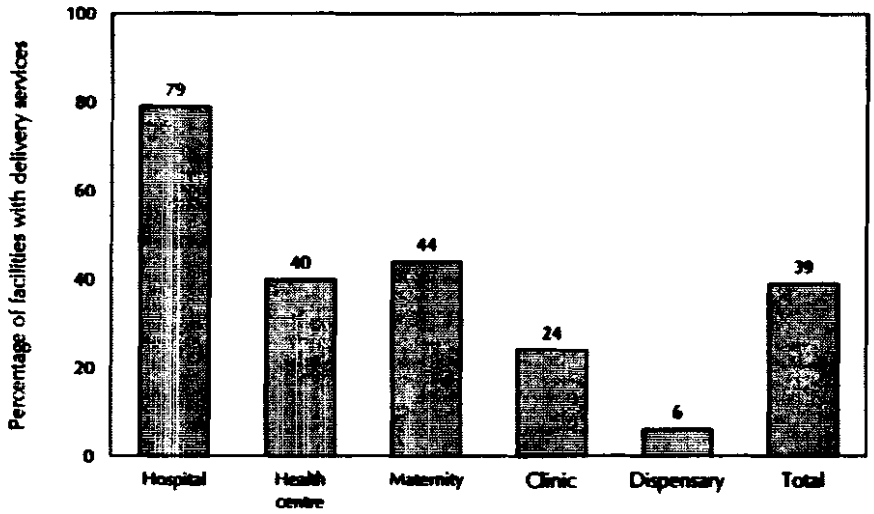
Table 3.15 Use of partographs for delivery services

Percentage of facilities offering delivery services, among these, the percentage with partographs, and percentage of interviewed delivery service providers reporting the indicated use of partographs, Kenya SPA 2004

Background characteristics	Percentage of facilities with delivery services	Number of facilities (weighted)	Percentage of facilities with delivery services that have partographs	Number of facilities with delivery services (weighted)	Percentage of delivery service providers reporting using a partograph					Number of delivery services providers (weighted)
					Within past one month	More than month ago[1]	More than 6 months ago	Never	Don't know/ missing	
Type of facility[2]										
Hospital	94	28	79	27	44	9	33	6	8	345
Health centre	64	125	40	80	34	11	28	15	12	243
Maternity	87	20	44	18	54	12	25	8	1	114
Clinic	14	8	24	1	35	3	32	29	2	2
Dispensary	15	249	6	38	8	3	60	21	8	84
Managing authority										
Government	35	245	44	86	34	12	42	10	2	427
NGO	87	16	17	14	20	5	58	11	0	22
Private for profit	48	61	39	29	59	4	14	7	15	171
FBO	33	109	35	35	31	9	27	16	17	168
Province										
Nairobi	30	37	82	11	36	14	36	12	2	133
Central	18	50	85	9	69	7	22	2	0	93
Coast	27	49	52	13	38	6	10	13	33	77
Eastern	32	81	45	26	36	9	42	12	1	87
North Eastern	35	8	23	3	49	4	42	4	0	5
Nyanza	49	54	28	26	39	3	31	10	17	149
Rift Valley	45	124	18	55	30	13	45	6	6	156
Western	69	29	51	20	28	10	36	24	2	88
Total	38	430	39	164	38	9	33	11	8	788

[1] More than a month ago but within past 6 months
[2] Stand-alone VCT facilities not eligible

Figure 3.4 **Availability of Partographs among Facilities With Delivery Services (N=164)**



Among providers who had used the partograph within one month of the interview, the majority were in maternities, private for-profit facilities, and in the Central province. Providers who had never used the partograph were most often in clinics, FBO facilities and in the Western province.

Monitoring of normal deliveries

Monitoring all deliveries helps to ensure the well-being of both mother and foetus and prompt action in case of complications. Table 3.16 provides information on critical practices for monitoring normal deliveries conducted in facilities surveyed.[4] The recommended standard/basic practice is to monitor the foetal heart rate, maternal pulse rate and uterine contractions every 30 minutes, and measure/check maternal blood pressure every 4 hours.

Information gathered from clients' delivery records or charts showed that foetal heart rate and uterine contractions were monitored/checked every 30 minutes for only one in five cases, while measuring blood pressure every 4 hours was documented as done in only 14 percent of cases. Pulse rate every 30 minutes was documented even less often (8 percent). All 4 critical practices were documented for only 5 percent of all reviewed normal delivery records. Nyanza province had the highest proportion of deliveries documented to have carried out all 4 critical practices (13 percent).

Only hospitals and maternities had recorded doing all four critical practices in their delivery notes. 17 percent and 10 percent, respectively. According to documentation, dispensaries, FBO and North Eastern, Rift Valley and Western provinces which perform relatively fewer standard delivery practices.

[4] These data came from either partographs or other records.

Table 3.16 Documentation of critical practices for monitoring normal deliveries

Percentage of recent normal deliveries where the delivery client records documented items for monitoring normal deliveries, Kenya SPA 2004

Background characteristics	Percentage of reviewed records with the indicated items documented					Number of normal delivery records reviewed (weighted)
	FHR[1] every 30 minutes	Assessment of contractions every 30 minutes	Blood pressure measured every 4 hours	Pulse measured every 30 minutes	All critical practices done	
Type of facility[2]						
Hospital	45	45	39	22	17	129
Health centre	15	13	6	3	0	330
Maternity	31	28	29	18	10	74
Clinic	10	22	4	0	0	4
Dispensary	2	2	2	0	0	132
Managing authority						
Government	13	15	10	4	2	350
NGO	26	32	9	19	8	29
Private for profit	41	29	26	17	12	134
FBO	15	17	13	5	4	157
Province						
Nairobi	46	42	25	22	9	55
Central	16	22	31	9	4	43
Coast	33	20	17	6	5	65
Eastern	21	22	15	4	3	84
North Eastern	13	8	5	4	1	14
Nyanza	31	32	22	19	13	93
Rift Valley	7	6	5	3	2	222
Western	17	19	9	5	2	93
Total	20	19	14	8	5	670

[1] Foetal heart rate
[2] Stand-alone VCT facilities not eligible

3.6.3 Complications of normal deliveries

Provider knowledge of signs of postpartum haemorrhage

The KSPA interviewed the most experienced maternal health provider present the day of the survey where maternal health services were offered, using the appropriate questionnaire to assess their knowledge of signs and treatment for postpartum haemorrhage. Interviewed providers were expected to spontaneously name 4 categories of signs and symptoms and 4 interventions.

Only 6 percent of interviewed midwives spontaneously named all 4 categories of haemorrhage signs and symptoms (Table 3.17). As expected, midwives in maternities are most knowledgeable, followed by clinics and private for-profit facilities. A higher proportion of midwives in Nairobi province was much better informed than in other provinces. The most frequently named category was signs of shock (60 percent) and only one in four midwives named retained products or placenta as a sign of postpartum haemorrhage. The North Eastern province does less well on a couple of signs/symptoms.

Table 3.17 Knowledge of signs of postpartum haemorrhage and of immediate interventions

Percentage of interviewed midwives who spontaneously described the indicated signs of postpartum haemorrhage and interventions for postpartum haemorrhage, Kenya SPA 2004

Background characteristics	Percentage mentioning indicated signs of postpartum haemorrhage					Percentage mentioning indicated interventions for postpartum haemorrhage[1]					Number of interviewed midwives (weighted)
	Uncontracted uterus	Signs of shock[2]	Amount of external bleeding	Retained products/ placenta	All four signs & symptoms	Massage fundus	Empty woman's bladder	Ergometrine IM or IV[3]	Start intravenous fluids	All four interventions	
Type of facility[4]											
Hospital	64	72	61	44	12	73	50	79	66	24	27
Health centre	55	67	43	41	2	72	43	74	60	17	86
Maternity	65	66	66	53	23	69	40	79	57	20	18
Clinic	75	45	53	61	16	62	68	81	31	15	2
Dispensary	48	45	60	35	4	67	49	76	10	0	65
Managing authority											
Government	55	70	48	37	5	77	45	76	44	14	115
NGO	41	28	62	4	1	38	58	99	5	0	14
Private for profit	49	64	65	46	13	69	34	74	70	18	30
FBO	65	40	55	60	3	62	52	70	36	7	40
Province											
Nairobi	94	60	49	76	31	60	64	99	79	40	11
Central	81	88	36	79	16	94	45	87	35	23	9
Coast	73	44	46	46	3	60	31	50	42	4	25
Eastern	60	60	59	32	3	93	56	86	60	15	35
North Eastern	26	56	28	44	0	35	0	44	50	0	3
Nyanza	34	56	43	42	3	35	38	82	21	1	35
Rift Valley	41	57	57	25	2	78	51	69	40	14	56
Western	68	79	68	51	11	80	44	82	50	15	25
Total	55	60	53	41	6	70	46	76	44	12	198

[1] Postpartum haemorrhage resulting from an aetonic or uncontracted uterus
[2] Dizziness or low blood pressure
[3] Intramuscularly or intravenously
[4] Stand-alone VCT facilities not eligible

Interventions for postpartum haemorrhage

Regarding interventions for postpartum haemorrhage, 70 and 76 percent of midwives, respectively, mentioned massaging the uterus and giving an intramuscular (IM) or intravenous (IV) injection of Ergometrine. Other interventions, such as emptying the patient's urinary bladder (46 percent) and giving intravenous fluids (44 percent) were mentioned less frequently. In particular, no midwife in the North Eastern province and only a third from the Coast mentioned emptying the bladder. Similarly, only 5 percent of respondents from NGOs mentioned the use of IV fluids for this emergency. In all, only 12 percent of all interviewed midwives were able to spontaneously name all 4 expected interventions for postpartum haemorrhage. Relatively more midwives in hospitals than in other types of facility were able to name all expected interventions, and more midwives in Nairobi than in other provinces were also able to name all four interventions compared to midwives in other provinces. No midwives interviewed in dispensaries, in NGO facilities and the North Eastern province were able to mention all four interventions.

Signal functions for emergency obstetric care

As part of the Averting Maternal Death and Disability (AMDD) project and in an effort to find intermediate indicators to track progress in the area of facility preparedness for maternal complications, "signal functions" have been developed, indicating the capacity of facilities to offer specialised services for emergency obstetric care. Table 3.18 shows the percentage of facilities that reported having carried out the indicated procedures/interventions (the "signal functions") in the last 3 months.[5]

Table 3.18 Signal functions for emergency obstetric care

Among facilities offering delivery services, percentage reporting the indicated procedure/intervention was carried out at least once during the past 3 months, Kenya SPA 2004

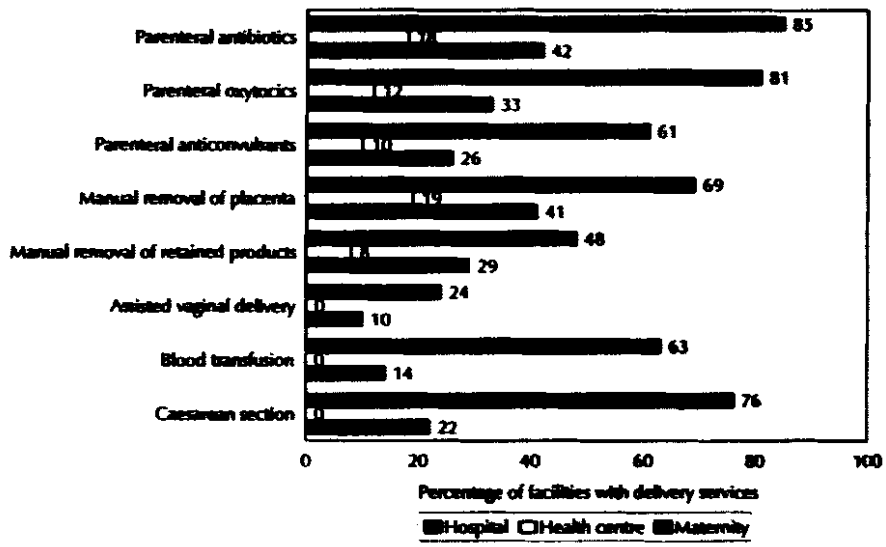
	Percentage								
Background characteristics	Parenteral antibiotics	Parenteral oxytocics	Parenteral anticon-vulsants/ sedatives	Manual removal of placenta	Manual removal of retained products	Assisted vaginal delivery	Blood transfusion	Caesarean section	Number of facilities (weighted)
Type of facility[1]									
Hospital	85	81	61	69	48	24	63	76	27
Health centre	18	12	10	19	8	0	0	0	80
Maternity	42	33	26	41	29	10	14	22	18
Clinic	28	24	8	0	0	8	0	8	1
Dispensary	17	6	6	11	0	0	0	0	38
Managing authority									
Government	22	16	17	29	14	1	9	9	86
NGO	31	28	6	28	6	4	5	4	14
Private for profit	45	38	25	36	25	16	18	31	29
FBO	43	31	25	17	12	6	16	19	35
Province									
Nairobi	25	25	20	20	13	9	15	23	11
Central	41	45	29	42	25	3	30	41	9
Coast	51	53	42	41	63	6	17	20	13
Eastern	14	14	9	27	7	5	11	12	26
North Eastern	38	23	35	35	16	13	23	13	3
Nyanza	36	11	10	17	17	6	12	11	26
Rift Valley	25	19	10	28	5	5	8	14	55
Western	50	39	48	28	16	1	8	7	20
Total	31	24	19	27	15	5	12	15	164

[1] Stand-alone VCT facilities not eligible

Almost one in three facilities report having administered parenteral antibiotics, followed by manual removal of the placenta (27 percent) and the administration of parenteral oxytocics. A second tier of functions are less frequently performed by facilities, such as using parenteral anticonvulsants/sedatives (19 percent), and performing manual removal of the placenta, caesarean sections and blood transfusions (between 12 and 15 percent). The one function least performed is assisted vaginal delivery (e.g., forceps, vacuum extractor), perhaps because of requiring specialised equipment and intensive training (Figure 3.5).

[5] The capacity to perform the first six functions denotes basic emergency obstetric care. The addition of the next two functions makes the facility capable of providing comprehensive emergency obstetric care.

Figure 3.5 **Performance of Signal Functions for Emergency Obstetric Care at Least Once during Past Three Months in Facilities With Delivery Services**



Among differentials it is clear health centres, clinics and dispensaries are least likely to provide critical emergency obstetric services. Additionally, the Eastern province is less able to administer parenteral antibiotics and oxytocics. Regarding IM/IV oxytocics, Nyanza province facilities are least likely to provide them. Use of parenteral anticonvulsants/sedatives is low in NGO facilities and in Eastern, Nyanza and Rift Valley provinces; however, it is high in Western and Coast provinces. Generally, other facilities rarely offer the remaining services, except for hospitals and maternities (to some extent). It is worth noting that fewer than half of all maternities examined, that specialise in delivery services, have provided the assessed procedures/interventions in the last 3 months. Particular mention should be made of life-saving procedures such as manual removal of placenta (41 percent), manual removal of retained products (29 percent), and assisted vaginal delivery (10 percent).[6]

3.7 STI Services

Sexually transmitted infections (STIs) are a major public health problem. STIs can cause infertility and increase the risk of transmission of human immunodeficiency virus (HIV). There is a certain degree of stigma associated with STIs, making it difficult for clients with symptoms to seek care. During any STI consultation providers are expected to ask clients about the 5 history elements noted in Table 3.19.

Providers asked all STI clients whose consultations were observed about their presenting complaints/symptoms. In 86 percent of cases, the provider asked about the duration of the symptoms, and in 78 percent the client's history of recent sexual contacts and his/her current relationship status.[7] In 73 percent of cases, providers asked about the occurrence of similar symptoms in their sexual partners. Overall, all elements of the history were assessed in 53 percent of observed consultations.

[6] This finding should be interpreted with caution because some maternities may, in fact, be referring complicated cases to higher-level facilities, and thus handle fewer women with serious complications.

[7] Clients are asked whether or not they are in a monogamous relationship and whether their partners are in a non-monogamous relationship.

The most comprehensive history was elicited by providers in hospitals and dispensaries, and in facilities in the Western province (Figure 3.6). Other than enquiring about the presenting symptom and its duration, providers in maternities did very little in terms of enquiring about the other history elements.

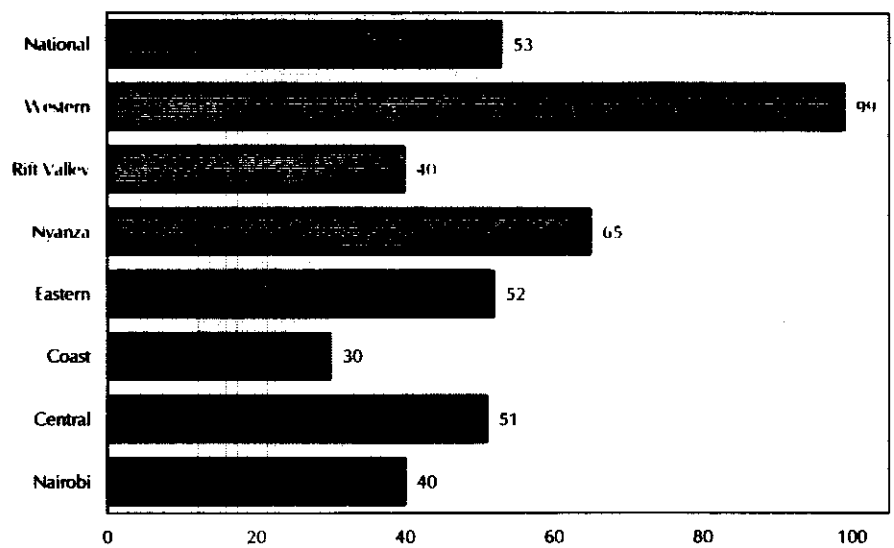
Table 3.19 Assessment of history of clients with symptoms of sexually transmitted infections

Among observed clients with symptoms of sexually transmitted infections (STIs), percentage where the indicated information was elicited, Kenya SPA 2004

Background characteristics	Percentage where provider enquired about: What symptoms the client has	How long the client has had the symptoms	Client's recent history of sexual contact	Symptoms in sexual partners	Client current relationship status[1]	All elements of history assessed	Number of observed STI client consultations (weighted)
Type of facility[2]							
Hospital	99	93	80	75	76	59	18
Health centre	100	88	75	82	91	51	52
Maternity	100	100	18	18	66	18	2
Clinic	100	100	64	50	58	40	2
Dispensary	100	81	84	65	66	57	43
Managing authority							
Government	100	86	77	75	86	53	83
NGO	100	100	100	100	100	100	0
Private for profit	100	100	62	55	77	55	6
FBO	100	84	85	70	55	55	26
Province							
Nairobi	100	77	87	76	68	40	28
Central	100	100	61	55	51	51	2
Coast	100	100	62	32	60	30	9
Eastern	100	54	98	52	100	52	9
Nyanza	100	78	93	70	71	65	22
Rift Valley	99	98	45	79	83	40	29
Western	100	100	99	99	100	99	16
Total	100	86	78	73	78	53	116

[1] Monogamous, multiple partners, nonmonogamous partner
[2] No observed clients in stand-alone VCT facilities

***Figure 3.6* Percentage of Observed STI Client Consultations Where Provider Assessed All Elements of History for STI, by Province (N=116)**



Promoting condom use among STI clients

Condoms can prevent the transmission of STIs (including HIV). Table 3.20 provides information on condom education provided to STI clients.

Providers discussed the role of condoms in preventing STI/HIV/AIDS in only 55 percent of observed consultations. Figures drop considerably thereafter: a low 21 percent of providers offers condoms to clients and meagre proportions instruct the client how to use them (17 percent), or demonstrate their proper use (7 percent). All four elements of promoting condom use occurred in only 7 percent of observed STI consultations.

Providers in maternities (18 percent) and in the Eastern (6 percent) and even in the Nairobi province (19 percent) hardly discuss condoms with clients. Hitherto, very few places commit to providing the client with instructions and condoms for their use, except in hospitals and health centres, at government facilities and in facilities in the Nyanza and Rift Valley provinces. This indicates the need to enhance STI program efforts in primary centres, nongovernmental facilities and in selected provinces of Kenya.

Table 3.20 Client education on condom use for prevention of sexually transmitted infections

Among observed clients with symptoms of sexually transmitted infections (STIs), percentage where the providers gave the indicated education related to use of condoms, Kenya SPA 2004

Background characteristics	Percentage where provider					Number of observed STI client consultations (weighted)
	Discussed role of condoms in preventing STIs including HIV/AIDS	Instructed the client how to use the condom	Demonstrated how to use the condom	Offered condoms to client	All four elements of promotion of condom use for prevention of STIs occurred	
Type of facility[1]						
Hospital	69	44	12	28	9	18
Health centre	68	15	13	38	13	52
Maternity	18	0	0	0	0	2
Clinic	39	0	0	0	0	2
Dispensary	35	10	0	0	0	43
Managing authority						
Government	61	23	10	29	10	83
NGO	0	0	0	0	0	0
Private for profit	57	3	0	0	0	6
FBO	35	0	0	0	0	26
Province						
Nairobi	19	1	0	0	0	28
Central	66	29	0	18	0	2
Coast	30	0	0	0	0	9
Eastern	6	2	0	1	0	9
Nyanza	92	35	2	23	1	22
Rift Valley	79	28	23	59	23	29
Western	60	18	8	11	8	16
Total	55	17	7	21	7	116

[1] No observed clients in stand-alone VCT facilities

Client perceptions on condom use

Reasons for not using condoms include: embarrassment about getting condoms and discussing its use with partner, reduction in sexual satisfaction in partner and in self and difficult to dispose of.

Among interviewed STI clients, only 38 percent had ever used a condom. Use seems to be much higher among clinic users, and clients in the Central and Eastern provinces. Twenty-two and 18

percent cited embarrassment as a reason preventing people from obtaining them or discussing them with partners. Embarrassment seemed an important reason for clients in the Eastern region, who otherwise were not concerned about other potential problems of condom use. Eighteen percent said condoms reduce partners' satisfaction. Lower percentages (13 and 7 percent) of STI clients said condoms reduce their own sexual satisfaction and are difficult to dispose of, as reasons why some people do not use them (Table 3.21).

Table 3.21 Client perception of major reasons people may not use condoms

Among observed and interviewed clients with symptoms of sexually transmitted infections (STIs), percentage reporting they think the indicated reason may contribute in a large measure to why some people may not use condoms and the percentage who reported they have ever used condoms, Kenya SPA 2004

	Percentage						
Background characteristics	Embarrassing to obtain condoms	Difficult to dispose of condoms	Embarrassing to discuss condoms with partner	Reduces own sexual satisfaction	Reduces partner's satisfaction	Ever used condoms	Number of interviewed STI clients (weighted)
Type of facility[1]							
Hospital	26	11	22	19	26	58	17
Health centre	17	13	13	13	29	38	52
Maternity	0	0	0	35	35	35	1
Clinic	20	0	9	11	41	70	1
Dispensary	28	0	25	10	0	27	43
Managing authority							
Government	19	10	25	17	23	45	83
NGO	0	0	0	0	50	100	0
Private for profit	3	3	3	8	11	23	5
FBO	36	0	1	2	3	16	26
Province							
Nairobi	13	1	0	1	7	33	28
Central	44	28	5	5	25	95	2
Coast	2	0	2	2	2	34	9
Eastern	49	1	49	4	7	93	9
Nyanza	26	1	26	22	20	15	22
Rift Valley	28	25	27	15	27	44	28
Western	19	2	19	31	32	29	16
Total	22	7	18	13	18	38	114

[1] Stand-alone VCT facilities not eligible

Client perception of services

STI clients were asked to comment on specific problems with the services they received. Few major problems were reported, except for the long waiting time (26 percent), especially among half of Nairobi clients (Table 3.22).

Table 3.22 Client feedback on services

Among observed and interviewed clients receiving services for sexually transmitted infections (STIs), percent who reported they felt the indicated element was a large problem for them, in relation to the services they received the day of the survey, Kenya SPA 2004

Background characteristics	Percentage								Number of interviewed STI clients (weighted)
	Long waiting time	Lack of ability to discuss concerns with provider	Not enough explanation from provider	Quality of examination and/or treatment	Lack of visual privacy	Lack of auditory privacy	Lack of availability of method/ medicines	Poorly treated by staff	
Type of facility[1]									
Hospital	25	1	2	1	1	0	9	2	17
Health centre	23	0	3	6	6	9	3	11	52
Maternity	0	0	35	100	35	35	35	0	1
Clinic	11	11	0	0	0	0	9	9	1
Dispensary	32	5	5	0	5	5	0	0	43
Managing authority									
Government	27	3	5	4	7	9	4	7	83
NGO	0	0	0	0	0	0	0	0	0
Private for profit	0	0	8	23	8	8	11	7	5
FBO	28	1	0	0	0	0	0	0	26
Province									
Nairobi	49	1	6	0	11	6	6	0	28
Central	20	0	0	0	0	0	0	0	2
Coast	30	0	0	0	0	0	0	2	9
Eastern	48	0	0	0	0	0	2	0	9
Nyanza	9	0	1	3	1	0	4	1	22
Rift Valley	5	0	0	12	0	12	0	12	28
Western	32	16	18	3	17	17	7	15	16
Total	26	2	4	4	5	7	3	5	114

[1] No observed stand-alone VCT facilities

3.8 Youth-friendly Services

Many youth in need of sexual and reproductive health care are not comfortable accessing existing services because they are not "youth friendly" and may not meet their needs. Coupled with this, providers are often biased, uneasy, or not adequately trained to serve sexually active youth. There has been a push in recent time to sensitise all staff at health care facilities on the provision of "youth-friendly" services (YFS), and in making the young people feel welcome.

Table 3.23 provides information on the availability of youth-friendly services at specific service sites or anywhere in health facilities. The components of youth-friendly services assessed include, but are not limited to, the provision of services in separate rooms, reduced user fees, and the availability of youth-specific educational materials on different topics.

The proportion of facilities with youth-friendly services in any service site is, unfortunately, very low (12 percent). However stand-alone VCT sites, NGO facilities, and facilities in Nairobi and Western provinces are more likely to provide youth-friendly services (Figure 3.7).

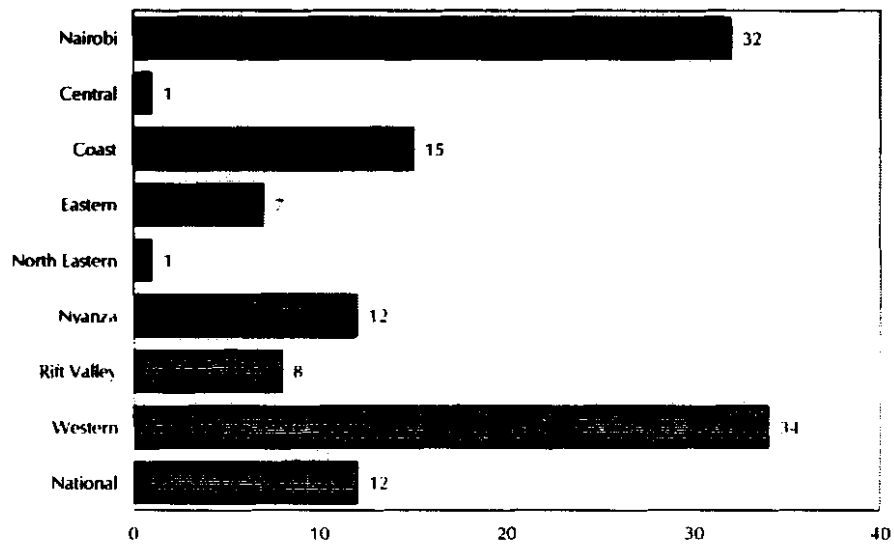
Table 3.23 Youth-friendly services

Percentage of all facilities which have youth-friendly services for the indicated service or anywhere in facility. Kenya SPA 2004

Background characteristics	Percent with youth-friendly services for						Number of facilities (weighted)
	Family planning	ANC	STI	VCT	PMTCT	Any provided service	
Type of facility							
Hospital	5	1	4	7	2	22	28
Health centre	5	3	6	10	6	18	125
Maternity	10	6	11	20	0	18	20
Clinic	2	4	2	12	0	15	8
Dispensary	na	na	na	14	0	7	249
Stand-alone VCT	na	na	na	21	0	41	10
Managing authority							
Government	4	1	4	20	5	14	246
NGO	2	1	4	14	0	24	21
Private for profit	3	9	2	6	2	13	63
Faith-based organisation				2	0	5	110
Province							
Nairobi	13	0	2	11	0	32	41
Central	0	1	1	0	0	1	50
Coast	1	8	7	18	15	15	49
Eastern	0	0	0	2	0	7	83
North Eastern				9	0	1	8
Nyanza	8	1	9	14	0	12	54
Rift Valley	1	0	0	23	2	8	126
Western	5	5	4	12	0	34	29
Total	3	2	3	12	3	12	440

na = Not applicable

Figure 3.7 **Percentage of Facilities with Youth-Friendly Services, by Province (N=440)**



3.9 HIV/AIDS Services

Given the spread of HIV/AIDS across the entire African continent, several initiatives have been implemented to prevent further HIV infection and to treat the affected individuals. In terms of the facility surveys, President Bush's Emergency Plan for AIDS Relief supported the collection of information on various aspects of facilities' preparedness to provide quality HIV/AIDS services to the people of Kenya. Some of the initial findings are presented in Tables 3.24 through 3.26.

3.9.1 Availability of selected HIV/AIDS services

The KSPA assessed the availability of the following HIV/AIDS services in facilities: voluntary counselling and testing (VCT), prevention of mother-to-child transmission (PMTCT), antiretroviral therapy (ART), and postexposure prophylaxis (PEP) for health workers. Table 3.24 provides detailed information.

Table 3.24 Availability of HIV/AIDS services

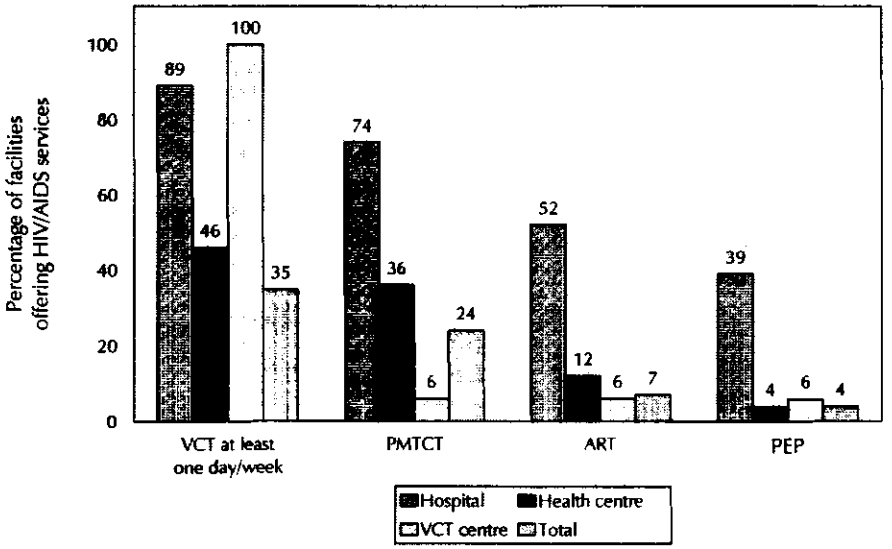
Percentage of facilities offering the indicated HIV/AIDS-related services, Kenya SPA 2004

	Percentage									
	VCT			PMTCT	ART	PEP[1]				
Background characteristics	Counselling services at least one day a week	Testing services at least one day a week	Both services at least one day a week	Service at facility	Service at facility	Available at facility[2]	Referred to another facility[3]	Not available	Total	Number of facilities (weighted)
Type of facility										
Hospital (all types)	89	91	89	74	52	39	7	54	100	28
Health centre	47	46	46	36	12	4	8	88	100	125
Maternity	50	46	45	35	6	0	4	96	100	20
Clinic	36	36	36	16	6	7	4	89	100	8
Dispensary	21	22	21	12	0	0	9	91	100	249
Stand-alone VCT	100	100	100	6	6	6	55	39	100	10
Managing authority										
Government	31	32	31	24	5	1	3	96	100	246
NGO	47	47	47	28	21	18	19	63	100	21
Private (for profit)	50	50	48	34	15	7	30	63	100	63
Faith-based organisation	36	35	35	17	6	6	11	84	100	110
Province										
Nairobi	73	73	73	55	19	18	27	55	100	41
Central	30	35	30	14	4	3	5	92	100	50
Coast	40	40	40	17	10	2	11	85	100	49
Eastern	38	38	38	24	12	2	12	86	100	83
North Eastern	12	12	12	*	2	1	2	97	100	8
Nyanza	19	19	19	15	5	1	2	95	100	54
Rift Valley	30	31	30	16	3	1	*	98	100	129
Western	43	36	36	30	5	1	2	96	100	29
Total	36	36	35	24	*	4	9	87	100	480

[1] PEP is post exposure prophylaxis
[2] PEP available to staff of facility anywhere in the facility
[3] Staff referred to another facility to receive PEP

Thirty-five percent of facilities offer both counselling and testing services at least one day a week. All stand-alone VCT sites (100 percent) and a majority of hospitals (89 percent) also offer both services. Less than 50 percent of the other facility types offer both services, especially dispensaries, which only offer them in around 20 percent of cases. Also, a smaller proportion of facilities in the North Eastern province (12 percent) offers these services at least one day a week (Figure 3.8).

Figure 3.8 **Availability of HIV/AIDS Services (N=440)**



Other HIV/AIDS-related services are offered at a smaller percentage of facilities. Thus, while PMTCT services are available at one-fourth of facilities, ART services are available at only 7 percent. Hospitals are more likely than other facilities to offer these two services and facilities in the North Eastern province are least likely to offer them.

Postexposure prophylaxis (PEP) is available in only 13 percent of facilities (4 percent at the facility, and 9 percent referred outside to another facility for PEP). Hospitals have PEP available onsite most often, and stand-alone VCT centres refer their health providers to other facilities for PEP most often. Facilities in Nairobi province and NGO facilities have PEP available the most often, whether onsite or referred outside.

3.9.2 Prevention of mother-to-child transmission (PMTCT) services

The minimum package of prevention of mother-to-child transmission (PMTCT) of HIV services comprises: voluntary counselling and testing (VCT), antiretroviral prophylaxis, infant feeding counselling, and family planning counselling and/or referral.

Overall, about one-fourth of all facilities offer some type of PMTCT services, including three-fourths of hospitals (74 percent) (Table 3.25). Only a third of maternities offer any of the components of PMTCT, and these are offered in even fewer VCT centres and FBO facilities. Not surprisingly, PMTCT services are more likely to be available in Nairobi and less available in Nyanza, Central, North Eastern and Rift Valley provinces (Figure 3.9).

Just over half of all facilities providing some elements of PMTCT offer all four items for the minimum package PMTCT. Hospitals are more likely to provide all 4 items (82 percent) compared with other facility types. A relatively larger proportion of private for-profit facilities and facilities in the Central province offer the minimum package.

Among the 4 components of PMTCT, over 80 percent of facilities offer counselling and testing, infant feeding counselling, and family planning counselling and/or referral. The following sections focus on the 4 individual components of PMTCT.

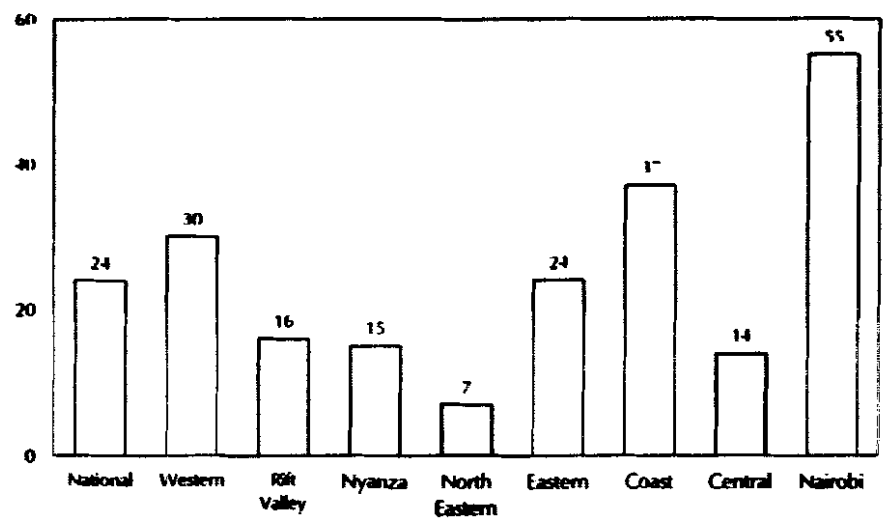
Table 3.25 Availability of PMTCT and PMTCT+ services (from HIV-SPA)

Percentage of facilities offering PMTCT services, and among facilities offering PMTCT, percentage offering the indicated component of PMTCT services. Kenya SPA 2004

Background characteristics	Percent of facilities providing any PMTCT services	Number of facilities (weighted)	Percent of facilities offering the indicated component of PMTCT[1]: Counselling and testing services[2] (VCT)	ARV prophylaxis to prevent MTCT[3]	Infant feeding counselling[4]	Family planning counselling and/or referral[5]	All four items for minimum package PMTCT	ARV therapy for HIV+ women and children[6]	All items for PMTCT+[7]	Number of facilities offering PMTCT services (weighted)	Number of program sites for PMTCT[8] (weighted)
Type of facility											
Hospital (all types)	74	28	98	89	95	91	82	53	48	21	45
Health centre	36	125	86	57	85	91	57	10	10	45	67
Maternity	35	20	81	70	67	85	53	3	3	7	13
Clinic	16	8	75	51	93	81	39	12	12	1	2
Dispensary	12	249	82	36	82	81	36	0	0	31	33
Stand-alone VCT	6	10	100	67	100	67	67	0	0	1	1
Managing authority											
Government	24	246	86	51	79	89	51	15	15	60	94
NGO	28	21	40	37	94	94	37	3	3	6	10
Private (for profit)	34	63	94	90	89	96	83	11	11	21	31
Faith-based organisation	17	110	98	53	98	70	46	24	18	19	26
Province											
Nairobi	55	41	100	82	100	79	78	13	13	22	31
Central	14	50	95	96	100	98	92	25	21	7	11
Coast	37	49	78	61	61	97	61	20	20	18	27
Eastern	24	83	100	38	78	80	36	10	10	20	27
North Eastern	7	8	100	17	100	100	17	17	17	1	1
Nyanza	15	54	98	47	87	100	43	21	21	8	16
Rift Valley	16	126	68	63	99	94	60	15	11	21	32
Western	30	29	68	11	68	72	11	8	7	9	14
Total	24	440	87	58	85	88	56	15	14	106	160

[1] Indicated services offered in the facility either as an outpatient or inpatient service
[2] Group (or individual) pretest information or counselling, or individual posttest counselling, and testing services
[3] Antiretroviral prophylaxis for HIV positive women and newborns
[4] The objective is to assess the mother's personal circumstances in order to help her select the best feeding option for her baby
[5] Counselling and referral on family planning offered to HIV positive women
[6] Antiretroviral therapy offered to HIV positive women and their eligible HIV positive family members
[7] PMTCT+ refers to provision of the minimum package of PMTCT services plus ARV therapy (sum of all previous columns)
[8] There may be several locations within the same facility where PMTCT services are offered. Each such location is defined as a service site

Figure 3.9 Percentage of Facilities Providing Any PMTCT Services, by Province



Voluntary Counselling and Testing

Eighty-seven percent of all facilities providing some elements of PMTCT offer counselling and testing services. All stand-alone VCT centres and 98 percent of hospitals with some aspects of PMTCT service offer counselling and testing. More FBO and private for-profit facilities and fewer NGO facilities or in Rift Valley and Western provinces offer these services, compared with other authorities and provinces.

ARV Prophylaxis

Approximately 60 percent of all facilities providing some elements of PMTCT offer antiretroviral prophylaxis to prevent the transmission of the virus from mother to child. This is the least provided aspect of PMTCT. Hospitals more likely to provide ARVs (89 percent) compared with other facilities. Private for-profit facilities and facilities in Central province are all more likely to provide this service.

Infant feeding counselling

Eighty-five percent of all facilities providing some elements of PMTCT offer infant feeding counselling to HIV-infected mothers. Interestingly, maternities are less likely to offer this service (67 percent) compared with hospitals (95 percent). FBO and NGO facilities offer infant feeding counselling more often and facilities in the Coast and Western provinces least often.

Family planning counselling and/or referral

There are no clear trends regarding the provision of family planning counselling and/or referral for HIV-infected women except that fewer stand-alone VCT centres, FBO facilities, and facilities in the Western province offer this service.

3.9.3 PMTCT plus

PMTCT *plus*, is the provision of the minimum package of services for PMTCT, plus the provision of ARV therapy for HIV-infected mothers and their eligible family members. Only 15 percent of facilities offering any elements of PMTCT services offer ARV therapy for HIV positive women and their eligible family members. This brings the total proportion of facilities offering the full PMTCT *plus* program to only 14 percent. Hospitals are more likely to provide all items for PMTCT *plus* compared with other facilities.

3.9.4 HIV testing services

The availability of counselling and testing services is an integral part of the provision of quality HIV/AIDS-related services. Table 3.26 provides details on the availability of HIV testing services in facilities in Kenya.

Almost 4 in 10 facilities have an HIV testing system, i.e., the facility conducts the test on site, has an affiliated laboratory, or has an agreement with an external site for HIV/AIDS tests. All stand-alone VCT centres and almost all hospitals (98 percent) have an HIV testing system. Relatively fewer dispensaries have a testing system. Private for-profit facilities have a slight edge over other authorities, and Nairobi province has a much larger proportion of facilities with HIV testing systems.

Table 3.26 Systems for testing and for providing results of HIV tests

Percentage of facilities with an HIV testing system and, among these, the percentage using the indicated system and with the indicated documents, Kenya SPA 2004

Background characteristics	Percentage with HIV testing system[1]	Number of facilities (weighted)	Facilities with the means for providing HIV test: Percentage with HIV test available either onsite or in affiliated laboratory[2]	Facilities with the means for providing HIV test: Number with HIV test available either onsite or in affiliated laboratory (weighted)	Percentage agreement with external site for HIV test	Number agreement with external site for HIV test (weighted)	Percent of facilities that conduct HIV/AIDS testing where indicated document was observed: Informed consent policy for HIV testing in all relevant service sites	Register with HIV test results	Record for clients receiving HIV test results	All items for indicator[3]	Number of facilities that conduct HIV/AIDS test (weighted)	Number of service sites[4] (weighted)
Type of facility												
Hospital (all types)	98	28	97	27	32	1	11	30	16	6	28	97
Health centre	53	125	66	62	100	4	40	45	35	13	66	128
Maternity	63	20	78	12	40	3	6	22	11	0	12	24
Clinic	38	8	78	3	33	0	32	70	55	13	3	5
Dispensary	22	249	55	46	0	4	51	85	60	8	54	58
Stand-alone VCT	100	10	82	10	100	0	89	98	96	73	10	11
Managing authority												
Government	35	246	56	80	32	1	44	50	45	7	86	172
NGO	48	21	85	10	100	0	70	75	72	57	10	15
Private (for profit)	56	63	90	32	67	6	38	40	14	5	35	71
Faith-based organisation	38	110	80	38	22	5	24	81	53	21	42	64
Province												
Nairobi	78	41	90	26	-	0	25	85	38	17	32	49
Central	37	50	62	18	0	0	27	59	41	25	18	34
Coast	40	49	82	17	94	3	17	10	7	2	20	78
Eastern	44	83	58	32	0	4	64	43	52	16	36	58
North Eastern	22	8	65	2	-	0	29	5	10	5	2	1
Nyanza	20	54	88	11	100	0	14	42	39	4	11	25
Rift Valley	32	126	73	40	0	1	55	78	56	7	40	55
Western	47	29	40	14	83	3	31	47	42	14	14	22
Total	39	440	70	160	47	12	39	57	42	13	172	322

[1] The facility either conducts the test (any type of HIV test anywhere in the facility, including ANC clinics), has an affiliated external laboratory where tests are conducted, or has an agreement with an external testing site from where the test results are expected to be returned to the facility.
[2] The facility has rapid test anywhere in the facility (including VCT and PMTCT service sites), has functioning ELISA equipment with all items necessary to conduct a test, or has all items for Western Blot or PCR tests available.
[3] Facility has testing capability on or offsite and has all documentation available
[4] There may be several locations within the same facility where the same service is offered. Each such location is defined as a service site.

Overall, 13 percent of facilities that have an HIV testing system have all items for the provision and documenting of HIV testing, i.e., in addition to a testing system, facility has all of the following documentation: informed consent policy for HIV testing, register with HIV test results, and records of clients receiving HIV test results observed in all relevant service sites.

Seven in ten facilities either conduct the test onsite or in an affiliated laboratory, and 47 percent have an observed referral system[8] for the test to be conducted outside the facility. A smaller proportion of health centres, government facilities and facilities in Central province conduct tests onsite or in an affiliated laboratory.

Of the facilities that have a testing system, 39 percent have an informed consent policy document available in all relevant service sites. A register with HIV test results and a record of clients

[8] Records were observed documenting that a referral system exists and that the results are returned to the facility.

who have actually received HIV test results was observed at 57 percent and 42 percent of all relevant service sites, respectively.

Stand-alone VCT sites did better with all three items mentioned above, with 89 percent having an informed consent policy document, 98 percent having a register with test results, and 96 percent having records of clients receiving test results. Private (for profit) institutions and maternities, though having the capacity to conduct HIV testing, fare lower on other supporting services (e.g., informed consent, registers of results, and clients receiving results), thus scoring only 5 percent on the overall indicator of capacity and documentation.

Appendix 1

WEIGHTING OF FACILITIES IN KSPA

When selecting a sample, very frequently there is interest in having data on specific types of services or facilities where a nationally representative sample will not provide sufficient numbers for meaningful analysis. In designing a sample selection to provide sufficient numbers of subsets of the data, these facilities or services may be over- or under-represented in the sample in relation to the proportion that exist in the nation as a whole. To compensate for over- or under-sampling, when presenting statistics that are meant to be nationally representative, the data are weighted. The weights ensure that such actual proportions of facilities and services as exist in reality appear in the data. Thus, if a type of facility or service is over-sampled, so that twice as many were included in the sample as should be, for nationally representative results, the results for the over-sampled services or facilities will be weighted down by 50 percent. The number of hospitals actually assessed (172) corresponds to 39 percent of the total sample. However, the real proportion of hospitals to all facilities as per the national list of facilities—i.e., the sampling frame for the Service Provision Assessment—is 6 percent. Thus, the number of hospitals was weighted down to 28, which reflects such actual percentage.

The weighted numbers are provided in the tables in the report and give information on what proportion of the total comes from this particular type of facility or province. It is important to know, however, that all facilities in the sample are used when calculating percentages. So, if a weighted number looks too small to be meaningful, it is important to review the unweighted number to know how many actual facilities/interviews contribute to this percentage. For example, in a sample of 100 facilities, if clinics represent 3 percent of all facilities, the weighted number of facilities shown will be "3". If, in fact, 20 clinics were sampled so that data could be provided for clinics alone, the data from these 20 clinics would be used to calculate the percentage that is shown for the "3 weighted" clinics.

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Zimbabwe	March	2000	English
Bangladesh	June	2000	English
Egypt	June	2000	English
Ethiopia	July	2000	English
Haiti	September	2000	French
Cambodia	November	2000	English
Turkmenistan	January	2001	English
Malawi	February	2001	English
Rwanda	February	2001	French
Armenia	March	2001	English
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Nigeria	October	2003	English
Kenya	December	2003	English
Indonesia (young adult)	December	2003	English
Jayapura City, Indonesia (young adult)	December	2003	English
Philippines	January	2004	English
Burkina Faso	May	2004	French
Ghana	June	2004	English
Morocco	June	2004	French
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